

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
12 May 2005 (12.05.2005)

PCT

(10) International Publication Number
WO 2005/042522 A1

(51) International Patent Classification⁷: **C07D 405/06**, (74) Agent: ASTRAZENECA; Global Intellectual Property, S-151 85 Sodertalje (SE).

(21) International Application Number:
PCT/GB2004/004481

(22) International Filing Date: 22 October 2004 (22.10.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0324791.3 24 October 2003 (24.10.2003) GB

(71) Applicants (for all designated States except US): ASTRAZENECA UK LIMITED [GB/GB]; 15 Stanhope Gate, London, Greater London W1K 1LN (GB). SHIONOGI & COMPANY LIMITED [JP/JP]; 1-8, Doshomachi 3-chome, Chuo-ku, Osaka 541-0045 (JP).

(72) Inventors; and

(75) Inventors/Applicants (for US only): OKADA, Tetsuo [JP/JP]; Shionogi & Company Limited, 12-4 Sagisu 5-chome, Fukushima-ku, Osaka 553-002 (JP). HORBURY, John [GB/GB]; AstraZeneca, Avlon Works, Severn Road, Hallen, Bristol BS10 7ZE (GB). LAFFAN, David, Dermot, Patrick [GB/GB]; AstraZeneca, Charter Way, Macclesfield, Cheshire SK10 2NA (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

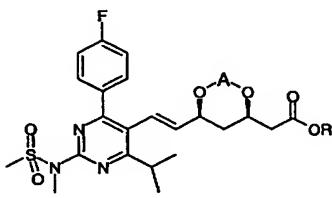
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

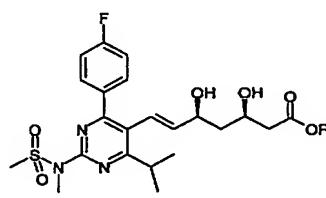
— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

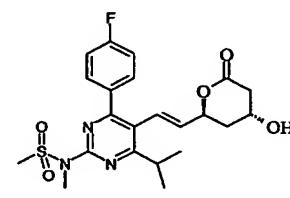
(54) Title: PROCESS FOR THE MANUFACTURE OF THE CALCIUM SALT OF ROSUVATATIN (E)-7-[4-(4-FLUOROPHENYL)-6-ISOPROPYL-2'-METHYL (METHYLSULFONYL) AMINO ! PYRIMIDIN -5-YL ! (3R, 5S) -3, 5-DIHYDROXYHEPT-6-ENOIC ACID AND CRYSTALLINE INTERMEDIATES THEREOF



(7)



(8)



(10)

WO 2005/042522 A1

(57) Abstract: A process for the manufacture of the calcium salt of (E)-7-[4-(4-fluorophenyl)-6-isopropyl-2-[methyl (methylsulfonyl) amino]pyrimidin-5-yl](3R,5S)-3,5-dihydroxyhept-6-enoic acid, useful as an HMGCoA reductase inhibitor, from a compound of the formula (7) wherein A is an acetal or ketal protecting group and R is alkyl, via isolated crystalline compounds of the formula (8) or of formula (10) is described. Crystalline intermediates of formulae 7, 8 and 10 are also described.